

July 8, 1985

State of Utah  
Natural Resources  
Oil, Gas & Mining  
355 West North Temple  
3 Triad Center - Suite 350  
Salt Lake City, Utah 84180-1203

RECEIVED  
OCT 07 1986

DIVISION OF  
OIL, GAS & MINING

RE: Mining Plan Modification, Redmond Bentonite Pit,  
Act/041/012, Seveir County, Utah.

ATTENTION: Susan C. Linner

Gentlemen:

This letter is in response to the letter dated June 11, 1985, to Mr. Tom Chiver of Western Clay Company.

The purpose of this letter is to respond to the requests for additional information. The response is organized to the rule numbers set forth in your letter.

The first request comes under RULE M-3, NOTICE OF INTENTION TO COMMENCE MINING OPERATION-DC.

- d - There are no surface facilities within 500 feet of the exterior limits of affected land. No new surface facilities have been installed. The operator has no plans to install surface facilities at the proposed pit. All servicing of equipment and any required maintenance will be done from the plant in Aurora.
- e - Additional elevations have been put onto the plan map. The contours were purposely not put on the map. The reason was because of the nature of the relief it would make it difficult to interpret. Therefore elevations and drainage lines were drawn in showing bentonite outcrop, waste disposal area and catch basins. The revised plan map shows an additional catch basin.

Another map has been included showing the topography of the total leased area.

The direction of the flow from the illustrated catch basins will be into existing washes and ditches. Because of the terrain surrounding and within the operating area there is very little runoff. The present drainage can easily handle any overflow that may occur over the catch basins.



# Mining Plan Modification (continued)

- 1 - The water collected in the pits will be pumped from the operating pit into the drainage that flows into the catch basin. There is nothing in the operation that will contaminate the water. The water will settle in the catch basin and will be disposed of thru natural evaporation or drainage.

Because of the nature of the Bentonite it cannot be mined if there is any water in the operating area. All water has to be pumped out of the area and let dry before mining.

## RULE M-5, SURETY GUARANTEE - JRH. RECLAMATION COST ESTIMATE.

	AMOUNT	RATE	COST
General Cleanup			\$ 100.00
Regrading & re-contouring	14 hours CAT 47	132.50/hr	1,855.00
	14 hours 621 D	180.00/h4	2,520.00
Stabilization	4 acres	68.90/acre	275.00
	2 hrs equip	40/hr	80.00
Labor	seeding 10 hrs	10.00/hr	100.00
Safety	Construct berms around highwalls		
	4 hrs CAT D7	132.50/hr	530.00
	Fencing (39' field fence with two strand barbwire) materials	285.25	285.25
	Labor		300.00
Monitoring	½ day/year for 3 years		150.00
TOTAL			6,195.25
	10% contingency		619.50
			<hr/> \$ 6,814.75

The reclamation costs will be near the same as the reclamation cost estimate presented on November 17, 1983. This was done for the existing pit. The regrading and contouring includes disking of the contours to prevent erosion.

A bond will be posted prior to commencement of operation.



## Mining Plan Modification (continued)

### RULE M-6, MAPS & PLANS.

Two maps have been prepared. One map shows pit location, waste area (includes area for any top-soil that can be recovered) elevations, drainage, and catch basin. The area covers 8.3 acres.

The other map shows location of both pits (old and new) topography, boundary of state lease, color code and legend.

### RULE M-8, REPORTS - JRH.

- a - Within 30 days the operator shall give Notice of Intention of commencement of operations.
- b - Operator will give yearly notice of operation and progress report. This will include location, date gross amount of materials removed, updated maps and records to be made available for examination by the members of the division staff.

### RULE M-10, RECLAMATION STANDARDS.

#### 1 - LAND USE - DC.

Operator will prepare land the same as it was for pre mine use.

#### 3 - IMPOUNDMENTS - DC.

This is included in the reclamation cost estimate. The slopes that are unstable will be graded as much as possible to the contour of the present relief. The slopes will be disked and will not exceed a 3:1 dip.

All rocks on stable slopes that are unstable shall be barred down.

#### 11 - SEDIMENT CONTROL

The material to be mined has no overburden. If however, a waste product is encountered it shall be stockpiled in the designated waste area. It will then be leveled off in the waste area so no erosion can occur. The slopes of the pit require maintaining a low angle. This is necessary to prevent slope sluffing during the operation. The angle of slope is dependent upon the dip of the Bentonite deposit.

Any erosion that will carry sediments shall be caught and settled in the Catch Basins.



## Mining Plan Modification (continued)

The Catch Basins sizes will be 6 feet in height 60 feet in length that will extend from one side to the other of the wash so the water can be impounded. The slopes will not be less than 3:1. An overflow shall be provided. The overflow shall be constructed so no erosion of the Catch Basin shall occur.

### 12 - REVEGETATION

The area of operation has less than 10% vegetation. The seeding will be done as follows.

Revegetation seed mix and application rate as recommended by local S.C.S. Range conservationist.

SPECIES	LBS Pure Live Seed/Acre
* Needle & Thread	1
Crested Wheatgrass	3
* Sand Dropseed	2
Yellow Sweet Clover	1
Siberian Wheatgrass	2
* Indian Ricegrass	2
* Shadscale	4
TOTAL	<u>15</u>
* Indicates presently existing species	

All planting will be done in the Fall in order to take advantage of Winter precipitation.

After the upper horizon material has been redistributed, it will be harrowed to prepare a suitable seedbed.

The areas which will be reseeded all are on Northwest slopes.

Seeding will be accomplished with a conventional rangeland drill.

This information is a supplement to the copy of Plan of Mining Operations sent to you that was addressed to the Division of State Lands and Forestry.

WESTERN CLAY COMPANY

---

Neal J. Mortensen  
President